

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

By way of this Amendment, Claims 1-17 have been canceled and new Claims 18-37 are presented for consideration.

The Official Action sets forth a rejection of the original claims based on the disclosure in U.S. Patent No. 2,585,815 to *McLintock*. It is respectfully submitted that the new claims patentably distinguish over the disclosure in this document.

McLintock discloses an injection syringe that includes a ratchet and pawl mechanism for administering a dose from a syringe. The Official Action indicates that the syringe disclosed in *McLintock* includes all of the features recited in the original independent claims. However, at least one of the features which is lacking in *McLintock* involves the recitation of the stopper disposed on the pusher to be slidable along the longitudinal direction of the pusher, with the depth of insertion of the pusher into the outer tube being restricted by abutment of the stopper on a portion of the outer tube. The new independent claims set forth these aspects of the syringe.

It is not at all clear from the Official Action the portion of the syringe disclosed in *McLintock* which is believed to correspond to the claimed stopper. However, a careful study of the disclosure in *McLintock*, taking into account the particular construction and operation of the disclosed syringe, reveals that there exists no structure corresponding to the claimed stopper that is slidable along the longitudinal direction of the pusher and that abuts a portion of the outer tube to restrict the depth of insertion of the pusher into the outer tube. For at least this reason, the new

independent claims presented here are patentably distinguishable over the disclosure in *McLintock*.

The original claims were also rejected based on the disclosure in U.S. Patent No. 5,531,708 to *Woodruff*. This document discloses a syringe adapted to dispense multiple dosages. The syringe includes a plunger 14 positioned within a container. A slide element 20 is mounted on the plunger 14 and is adapted to be moved along the plunger 14. The slide element 20 can be positioned at a number of predetermined positions along the plunger by engagement of the slide element 20 with teeth 26 provided on the upper surface of the plunger 14.

One of the differences between the syringe at issue here and the disclosure in *Woodruff* involves the biasing means operating together with the fixing means that selects and fixes the position of the stopper on the pusher. Claim 18 recites the biasing means that biases the pressing portion to bring it into the first position, and also recites that the fixing means is normally in such a state that the pressing portion is located in the first position and the engaging portion is engaged with the rack to fix the stopper, with the fixing means being so operated that when the operating portion is operated, the pressing portion is moved to the second position, whereby the engaging portion is retracted from the rack and fixation of the stopper is released, and when the operation on the operating portion is released, the fixing means is returned to the state for fixation of the stopper by the biasing force of the biasing means.

Claim 21 recites that the fixing means comprises biasing means that biases the engaging portion to displace from a state of being retracted from the rack to a state of being engaged with the rack, with the fixing means being normally in a state

in which the engaging portion is engaged with the rack to fix the stopper. Claims 18 and 21 further recite that the fixing means is operated so that when the operating portion is operated, the engaging portion is retracted from the rack to release fixation of the stopper, and when the operation on the operating portion is released, the fixing means is returned to the state for fixing the stopper by the biasing force of the biasing means. Thus, when the operating portion is released, the biasing means applies a biasing force to bias the pressing portion in a way that returns the fixing means to a position fixing the position of the stopper.

The syringe disclosed in *Woodruff* does not include such a biasing means. As disclosed in *Woodruff*, when the downwardly applied force on the lever 44 is released, the slide element can be returned to the normal position shown in Fig. 4A due to the way in which the slide segment is connected with the rear segment 40 and the lever 44. Because the slide element 20 is a single piece that includes the slide segment 36, the rear segment 40 and the lever 44, the ability of the slide element to be returned to the normal position will deteriorate with use. The syringe at issue here, including the use of the biasing means that biases the pressing portion, is not as susceptible to such problems.

It is thus respectfully submitted that independent Claims 18 and 21, together with the dependent claims, are allowable.

Another difference between the syringe at issue here and the disclosure in *Woodruff* involves the pusher being provided with a pair of abutment surfaces that are substantially parallel to one another, with one or both of such abutments surfaces being formed as rough surfaces or of a material having a high frictional resistance. Such feature, which is set forth in independent Claim 24, is not disclosed

in *Woodruff*. Accordingly, withdrawal of the rejection based on the disclosure in *Woodruff* is respectfully requested.

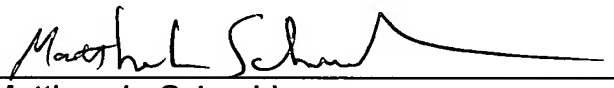
For at least the reasons set forth above, it is respectfully submitted that the claimed syringe at issue here is patentably distinguishable over the disclosures contained in the applied documents. Accordingly, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL PC

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By: 
Matthew L. Schneider
Registration No. 32,814

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620